

412-003-00032

United States Steel Clairton Works

Title V Operating Permit #0052

Semi-annual Report

July 1st – December 31st 2014



United States Steel Corporation
Clairton Works
400 State Street
Clairton, PA 15025

January 30, 2015

Ms. Jayme Graham
Allegheny County Health Department
Division of Air Quality
301 Thirty-Ninth Street
Pittsburgh, PA 15201

Enforcement
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**SUBJECT: U.S. Steel Clairton Works
Title V Operating Permit # 0052
Semi-annual Report
July 1 through December 31, 2014**

Dear Ms. Graham:

This submittal satisfies the semi-annual reporting requirement of Title V Operating Permit No. 0052, Paragraph III.15 for the period of July 1 through December 31, 2014.

On behalf of U.S. Steel Clairton Works, I certify that I have personally examined and am familiar with the information contained in this report. The information contained in this report is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete.

If you have any questions regarding this submittal, please direct them to Coleen Davis at 412-233-1015 or cdavis@uss.com.

Sincerely,

Scott D. Buckiso
General Manager, Mon Valley Works

Permit Requirement IV.8 – Breakdown Notification

There were no deviations of the breakdown notification requirements.

Permit Requirement IV.9 – Boiler Cold Start

This fulfills the requirements for semi-annual reporting of boiler cold starts per the waiver received in accordance with ACHD Article XXI §2108.01.d.

During the period covered by this report, cold starts were performed on the following boilers on the following days:

<u>Date</u>	<u>Boiler</u>	<u>Time</u>
July 24	T1	0955
July 25	R2	1010
July 27	R1	0840
July 29	T1 & R2	0720
August 5	T1	1005
August 11	T1	0745
August 10	T2	0615
August 15	T1	0650
September 16	R1	0845
September 18	R1	1605
September 24	T2	1105
September 26	T1	1140
September 29	T1	1115
September 30	T2 & R2	0650 & 0715
October 6	T2	905 & 1150
October 12	Boiler 2	1700
October 27	Boiler 2	0740
October 31	T1	1330
October 18	R1	0640
November 3	T2	1005
November 8	T1	0655
November 12	T1 & T2	0915 & 0805
November 13	R2	1520
November 18	R1	1550
November 26	T2 & T1	0530 & 1015
December 2	T1	1345
December 9	T1 & T2	0830 & 0815
December 16	R1 & R2	0705 & 0645
December 29	T1 & T2	1130 & 1045

**Paragraph IV.29 – Consent Order and Agreement dated March 17, 2008 –
Batteries 1, 2, 3, 13, 14, 15, 19, 20 and B**

Please accept this submittal as the Quarterly Report for United States Steel, Clairton Coke Works for the period of October 1 through December 31, 2014 according to the reporting requirements of the Clairton Plant portion of the Mon Valley Works Consent Order and Agreement signed March 17, 2008, amended September 30, 2010 and amended July 6, 2011. A check in the amount of \$90,500 for 4th quarter stipulated penalties is attached.

There were no walls on 19 and 20 Batteries out of service for repair or replaced and put back into service nor are there any walls scheduled to be repaired during the first quarter 2015; the repairs have been completed.

Milestone	Date	Status
Install, maintain, and operate a SODAR for 3 years		Complete

The list of clock hours during for the period of October 1 through December 31, 2014 that compliance was not achieved for Article XXI opacity limits on Batteries 1, 2, 3, 13, 14, 15, 19, 20, and B combustion stack as measured by the continuous opacity monitor (COM) per Paragraph V.a.1 along with the date, time, root cause and last oven charged for each exceedance are listed in the attached Appendix.

The deviations during for the period of October 1 through December 31, 2014 compliance was not achieved for Article XXI §2105.21(e)(4) and (e)(5) limits on Batteries 1, 2, 3, 13, 14, 15, 19, 20, and B per Paragraph V.a.1 along with the oven, date, time, and root cause for each exceedance are attached in the attached Appendix.

There were no instances of deviations with the soaking restriction except that an outage prevented the observation of 4 observations on 2 Battery on October 16. A training malfunction caused the four soaking observations on 2 Battery on December 11 to be invalid.

There were no instances of deviations with the minimum coking time restriction on Batteries 1, 2 or 3

There were no deviations of the testing requirements except that outages the following dates prohibited the observation of pushing observations: 1 Battery – October 8 (one), December 11 (four), and December 30 (five); 2 Battery - December 11 (eight); and 3 Battery – December 11 (four).

Permit Section V.A - Batteries 1, 2, and 3

Permit Requirement V.A.1.a, b, c, d, and e – Battery Flare System – Batteries 1, 2, and 3

There were no deviations of the above requirements relating to the operation of the battery coke oven gas flare system on, during the period covered by this submittal.

Permit Requirement V.A.1.f – Big Plug Doors - Batteries 1, 2, and 3

There were no deviations of the requirement to install and operated big plug doors with the following clarification of certification as submitted as part of the Title V Application Process.

The compliance certification contained in this submittal is based on the understanding that big plug doors, required by §2105.21.b.5, meet the specified dimensions contained in the regulation when initially installed except that portion of the plug located in the tunnel head above the design coal line. The plugs may experience inconsequential dimensional changes over time in the course of normal operations.

Permit Requirement V.A.1.g - §63.310(a)

There were no deviations to the above reference requirement.

Permit Requirement V.A.1.h – Flare or Combustion of High H₂S Coke Oven Gas-- Batteries 1, 2, and 3

There were no deviations of the above requirements relating to the operation of the battery coke oven gas flare system during the period covered by this submittal on Batteries 1, 2 or 3.

There were no other deviations.

Permit Requirement V.A.1.i – Visible Opacity from Flare Operation– Batteries 1, 2, and 3

There were no documented deviations of the above requirement related to the operation of the battery coke oven gas flare system during the period covered by this submittal.

Permit Requirement V.A.1.j, and k –§63.304 and 63.306 Requirements – Batteries 1, 2, and 3

There were no deviations of the above requirement (30-day rolling averages or implementation of Work Practices for doors, lids, charging, and offtakes) during the period covered by this submittal.

Permit Requirement V.A.1.l, m, n, o, and p –§2105.21a, b, c, and d Requirements – Batteries 1, 2, and 3

On Battery 1 there were no deviations of the above requirements for percent leaking doors (for 100% compliance), one deviation for lids (for 99.48% compliance) and one deviations for offtakes (for 100% compliance), three deviations for 40 percent door leaking after 15 minutes (for 99.99% compliance) and zero deviation for excess seconds of charging (for 100% compliance). Details are listed in the attached Appendix.

On Battery 2 there were the following deviations of the above requirements for percent leaking doors (zero deviations for 100% compliance), lids (zero deviations for 100% compliance), offtakes (zero deviation for 100% compliance), 40 percent door leaking after 15 minutes (four deviation for 99.98% compliance) or excess seconds of charging (zero deviations for 100% compliance). Details are listed in the attached Appendix.

On Battery 3 there were the following deviations of the above requirements for percent leaking doors (zero deviation for 100% compliance), lids (zero deviations for 100% compliance), or offtakes (zero deviations for 100% compliance), 40 percent door leaking after 15 minutes (three deviations for 99.99% compliance) or excess seconds of charging (one deviation for 99.48% compliance). Details are listed in the attached Appendix.

Permit Requirement V.A.1.q –§2105.21.e.5 Travel Requirements – Batteries 1, 2, and 3

There were 6 deviations on Battery 1 (for 99.6% compliance), 6 deviations on 2 Battery (for 99.6% compliance), and 7 deviations on 3 Battery (for 99.54% compliance) of the opacity limitations for the transport of hot coke through the open atmosphere (travel) during the reporting period of this submittal. Details are listed in the attached Appendix.

Permit Requirement V.A.1.r –§2105.21.f.2 Stack Mass Emission Limit – Batteries 1, 2, and 3

There were no documented deviations of the above requirement during the reporting period of this submittal.

Permit Requirement V.A.1.s –§2105.21.f.3 and 4 Stack Opacity Limits – Batteries 1, 2, and 3

There were 53 deviations on Battery 1 (for 98.79% compliance), 169 deviations on Battery 2 (for 96.15% compliance), and 157 deviations on Battery 3 (for 96.43% compliance) of the 20% stack opacity limit. There were 3 deviations on Battery 1 (for 99.93% compliance), 37 deviations on Battery 2 (for 99.16% compliance), and 33 deviations on Battery 3 (for 99.25% compliance) of the 60% stack opacity limit. Details are listed in the attached Appendix.

Permit Requirement V.A.1.t and u –§63.72969a), (b), and (d) - Stack Opacity Limits – Batteries 1, 2, and 3

There were no deviations of the above limitations or requirements during the reporting period covered by this submittal. All notifications were submitted as required.

Permit Requirement V.A.1.v –Emissions Limitations Table – Batteries 1, 2, and 3

There were no deviations.

Permit Requirement V.A.2 –Testing Requirements – Batteries 1, 2, and 3

There were no deviations of the testing requirements.

Permit Requirement V.A.3 –Monitoring Requirements – Batteries 1, 2, and 3

There were no deviations of the monitoring requirements except that an outage prevented the observation of 4 soaking observations on 2 Battery on October 16. A training malfunction caused the four soaking observations on 2 Battery on December 11 to be invalid.

There were no deviations of the monitoring requirements except that outages the following dates prohibited the observation of pushing observations: 1 Battery – October 8 (one), December 11 (four), and December 30 (five); 2 Battery - December 11 (eight); and 3 Battery – December 11 (four).

Permit Requirement V.A.4 – Record Keeping Requirements

Out-of-control periods per permit requirement V.4.c and §63.7341 (c)(6) and (8)(iii) and/ or inoperable periods per §63.7341 (8)(ii) for stack COM's are detailed in Appendix 4.

There were no other record keeping deviations.

Permit Requirement V.A.5.a – Coke Plant Operations Data

The reports required by Paragraph V.A.5.a were submitted as required no later than twenty days after the end of each month. The reports for the reporting period are included in the attached Appendix.

Permit Requirement V.A.5.b – Battery NESHAP – Batteries 1, 2, and 3

According to the semi-annual compliance certification and reporting requirements of 40 CFR §63.311(d) for the period covered by this report,

No coke oven gas was vented except through the bypass/ bleeder stack flare system of Batteries 1, 2, or 3.

There were no startup, shutdown, or malfunction events for Batteries 1, 2, or 3 that required the implementation of §63.310.

Work practices were not implemented under §63.306 at Batteries 1, 2, or 3.

Permit Requirement V.A.5.c – Venting of Coke Oven Gas

There were no instances of venting of coke oven gas during the report time period therefore, no reports were required.

Permit Requirement V.A.5.d – §63.310(d) Notification

There were no instances of startup, shutdown, or malfunction events for Batteries 1, 2, or 3 that required the implementation of §63.310 during the report time period therefore, no notifications were required.

Permit Requirement V.A.5.e – §63.310(e) Reports

There were no instances of startup, shutdown, or malfunction events for Batteries 1, 2, or 3 that required the implementation of §63.310 during the report time period therefore, no reports were required.

Permit Requirement V.A.5.f and g – Enforcement Order dated March 17, 2008

See above.

Permit Requirement V.A.5.h – §63.7336(a) - MACT Stack Requirements

There were no instances where the emission limitations in Conditions V.A.1.t (daily average stack opacity) or V.A.1.u (initial compliance status notification) were not met.

Permit Requirement V.A.5.i – §63.7336(b) – Periods of Startup, Shutdown, or Malfunction

There were not periods of start-up, shutdown, or malfunction that required the implementation of the Startup, Shutdown, or Malfunction Plan relating to the requirements of 40 CFR Part 63 Subpart CCCCC.

Permit Requirement V.A.5.j – §63.7340(a) – Initial Notifications

All required notifications required by §63.6(h)(4) and (5), §63.7(b) and (c), §63.8(e) and (f)(4) and §63.9(b) through (h) that apply were submitted by the specified dates.

Permit Requirement V.A.5.k, and i – §63.7341(a) and (b) – Submittal of Quarterly Stack Compliance Reports

The 3rd Quarter 2014 compliance reports for Battery Stacks 1, 2, and 3 were submitted as required and contained the information required. The reports for the 4th Quarter 2014 are included in this submittal.

Permit Requirement V.A.5.m – §63.7341(c)- Quarterly Stack Compliance Report

The 3rd Quarter 2014 compliance reports for Battery Stacks 1, 2, and 3 were submitted as required, according to the reporting requirements of 40 CFR §63.7341 and contained the information required. The reports for the 4th Quarter 2014 are included in this submittal.

Out-of-control periods per §63.7341 (c)(6) and (8)(iii) and/ or inoperable periods per §63.7341 (8)(ii) for stack COM's are detailed in the attached Appendix.

During the period stated above there were no start-ups, shutdowns, malfunctions or deviations relating to the emission limitation requirements of daily stack opacity.

Permit Requirement V.A.5.n – §63.7341(d)- Startup, Shutdown, or Malfunction Occurrences

During the period stated above there were no start-up, shutdown, malfunctions or deviations that required the implementation of the requirements in §63.10(d)(5)(ii).

Permit Requirement V.A.5.o – §63.7341(e) – Reporting of Deviations

All deviations have been submitted as required to the best of our ability.

Permit Requirement V.A.6 – Work Practices

There were no deviations from the work practice requirements required by Permit Paragraph V.A.6.

Batteries 1-3 PEC

Permit Requirement V.B.1.a – §2105.21.e and IP 0052-I006 – PEC Outlet and Pushing Emissions

There were no documented deviations from the particulate mass emission rate from the pushing emission control system device.

During the period stated above there were 8 instances out 1495 observations of non-compliance on 1 Battery (99.46% compliance), 9 instances out of 1581 observations on 2 Battery (99.43% compliance) and 6 instances out of 1506 on 3 Battery (99.6% compliance) with Condition VI.1.a.2 (fugitive pushing emissions or emissions from the pushing emission control system device outlet equal or exceeding an opacity of 20%). The details of these instances along with corrective actions taken are attached in the attached Appendix.

Permit Requirement V.B.1.b – §2105.21.e.6 – PM-10 SIP contingency

Implementation of the PM-10 SIP Contingency Plan was not required during the reporting period.

Permit Requirement V.B.1.c – §2105.03 and IP 0052-I006 – Pushing with the PEC

During the period stated above there were 14 instances of non-compliance with the above requirement (emissions due to pushing of Battery 1, 2, and 3 coke ovens shall be vented through the PEC system baghouse dust collector) that resulted in 4173 ovens not being captured. There were 5 instances of reduced efficiency pushing operations at Battery No. 1, 2, and 3 PEC baghouse that affected 315 ovens. These were detailed in monthly coking process reports submitted as required by Enforcement Order 202.E which are in the attached Appendix.

There were 4 instances where the dp was greater than 10 and corrective action was implemented to return the dp to the normal operating range. These are detailed in the attached Appendix.

Permit Requirement V.B.1.d – §63.7290(a) – Mass Emission Rate from PEC - MACT

During the period stated above, there were no documented deviations with the requirements of §63.7290 on the pushing emissions control (PEC) devices servicing Batteries 1-3.

Permit Requirement V.B.1.e – §63.7290(b)(3) – Minimum Daily Fan Amps

There were zero deviations for recording the fan amps on 1-3 PEC. These are detailed in the attached Appendix.

There were no deviations from the minimum fan amp requirement for Batteries 1-3. There were no other deviations with the requirements of the minimum fan amperes as established during the initial performance test per the requirements of §63.7333(d) for these units.

Permit Requirement V.B.1.f – §63.7333(a) – Maintaining Compliance with Mass Emission Rate and Testing

During the period stated above, there were no documented deviations with the requirements of §63.7333(a) on the pushing emissions control (PEC) devices servicing Batteries 1-3.

Permit Requirement V.B.1.g – §2105.03 and IP 0052-I006 – Emissions Limitations Table

During the period stated above, there were no documented deviations with above referenced requirements on the pushing emissions control (PEC) devices servicing Batteries 1-3.

Permit Requirement V.B.2 – Testing

There were no deviations to the testing requirements.

Permit Requirement V.B.3.a and b – IP0052-006 – Monitoring of differential pressure drop

There were no deviations to the above referenced monitoring requirements.

Permit Requirement V.B.3.c - §63.7291(a) – Pushing Observations

During the reporting period, there were no ineffective corrective actions pushing observations. The following ovens were observed outside of the 90-day window due to oven conditions and repairs but were observed on the first daylight push. These ovens are: A17, A18, A19, A21, A23, A24, A25, A26, and A27 on 2 Battery and A21 on 3 Battery. Every effort is being made to allow for an observation per the procedure in §63.7334(a). There were ten malfunctions that caused daylight pushes to be missed being observed on B26/1, A19/3 (four missed), A26/2, A21/2, A20/2, A22/2 (two missed). The following ovens could not be observed per the procedure in §63.7334(a): B7 on 2 Battery and A20, A21, A22, A23 and A24 on 3 Battery due to oven repairs and work zones safety restrictions. There were no other start-up, shutdown, malfunctions or deviations relating to the pushing work practice requirements of §63.7291(a). Every effort is being made to allow for an observation per the procedure in §63.7334(a). There were no other start-up, shutdown, malfunctions or deviations relating to the pushing work practice requirements of §63.7291(a).

Permit Requirement V.B.3.d - §63.7291(b) – Alternate to Work Practice

No alternate has been requested.

Permit Requirement V.B.3.e - §63.7300(c) – O&M Plan for PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.B.3.f, g, and h - §63.7330(a) and 63.7331(a) and (b) – Bag Leak Detection System for PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.B.3.i through k - §63.7331(c), (d) and (h)

There were no deviations to the above referenced requirements.

Permit Requirement V.B.3.l - §63.7331(g) – Volumetric Flow

The above requirement does not apply.

Permit Requirement V.B.3.m, n, and o - §63.330(d), 63.7332(a), and (b)

There were no instances of missing the required recording of the fan amps on 1-3 PEC.

Permit Requirement V.B.3.p - §63.333(d) – Minimum Fan Amps

There were no deviations for recording the fan amps on 1-3 PEC. There were no deviations from the minimum fan amp requirement for Batteries 1-3. There were no other deviations with the requirements of the minimum fan amperes as established during the initial performance test per the requirements of §63.7333(d) for these units.

Permit Requirement V.B.3.q - §63.7334(a) – Pushing Observations

See above permit requirement.

Permit Requirement V.B.3.r - §63.7335(c) – Inspection of PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.B.4 – Record Keeping

There were no deviations to the above referenced record keeping requirements.

Permit Requirement V.B.5.a – Coke Plant Operations Data

The reports required by Paragraph V.A.5.a were submitted as required no later than twenty days after the end of each month. The reports for the reporting period are attached in the attached Appendix.

Permit Requirement V.B.5.b, c, and d– IP0052-006 – Reporting of Instances of Non-compliance and Breakdown Reports

Instances of non-compliance per the above requirement are included in this submittal for the reporting period. There were no deviations regarding breakdown reporting.

Permit Requirement V.B.5.e through k – Reporting Requirements

There were no deviations with the above referenced reporting requirements.

Permit Requirement V.B.6 – Work Practice Standards

There were no deviations to the above referenced work practice standards.

Permit Section V.C – Batteries 13, 14, and 15

Permit Requirement V.C.1.a, b, c, d, and e – Battery Flare System – Batteries 13, 14, and 15

There were no documented deviations of the above requirement related to the operation of the battery coke oven gas flare system during the period covered by this submittal on Batteries 14 or 15. On August 3, an obstruction on the damper dish seal caused the flare system on 13 Battery to be unavailable.

There were no other deviations of the above requirements relating to the operation of the battery coke oven gas flare system, during the period covered by this submittal.

Permit Requirement V.C.1.f – Startup, shutdown, Malfunction - Batteries 13, 14, and 15

There were no deviations of the above referenced requirement.

Permit Requirement V.C.1.g – Flare or Combustion of High H₂S Coke Oven Gas– Batteries 13, 14, and 15

There were no deviations of the above requirements relating to the operation of the battery coke oven gas flare system or the combustion of high H₂S COG during the period covered by this submittal on Batteries 13, 14, and 15.

There were no other deviations.

Permit Requirement V.C.1.h – Visible Emissions from Flare Operation– 13, 14, and 15

There were no documented deviations of the above requirement.

Permit Requirement V.C.1.i, and j – §63.304 and 63.306 Requirements – Batteries 13, 14, and 15

There were no deviations of the above requirement (30-day rolling averages or implementation of Work Practices for doors, lids, charging, and offtakes) during the period covered by this submittal.

Permit Requirement V.C.1.l, m, n, and o – §2105.21a, b, c, and d Requirements – 13, 14, and 15

On Battery 13 there were the deviations of the above requirements for percent leaking doors (zero deviations for 100% compliance), lids (one deviations for 99.49% compliance), or offtakes

(zero deviations for 100% compliance), 40 percent door leaking after 15 minutes (zero deviations for 100% compliance) and excess seconds of charging (zero deviations for 100% compliance). Details are listed in the attached Appendix.

On Battery 14 there were the following deviations of the above requirements for percent leaking doors (zero deviations for 100% compliance), lids (one deviations for 99.49% compliance), or offtakes (zero deviations for 100% compliance), 40 percent door leaking after 15 minutes (one deviation for 99.996% compliance) or excess seconds of charging (one deviations for 99.48% compliance). Details are listed in the attached Appendix..

On Battery 15 there were the following deviations of the above requirements for percent leaking doors (zero deviation for 100% compliance), lids (zero deviations for 100% compliance), or offtakes (zero deviation for 100% compliance), 40 percent door leaking after 15 minutes (zero deviations for 100% compliance) or excess seconds of charging (zero deviations for 100% compliance). Details are listed in the attached Appendix.

Permit Requirement V.C.1.p –§2105.21.e.5 Travel Requirements – Batteries 13, 14, and 15

There were 0 deviations on Battery 13 for 100% compliance, 12 deviations on Battery 14 for 98.53% compliance, and 10 deviations on Battery 15 for 98.77% compliance of the opacity limitations for the transport of hot coke through the open atmosphere (travel) during the reporting period of this submittal. Details are listed in the attached Appendix.

Permit Requirement V.C.1.q –§2105.21.f.2 PM Stack Mass Emission Limit – Batteries 13, 14, and 15

There were no documented deviations of the above requirement during the reporting period of this submittal.

Permit Requirement V.C.1.r –§2105.21.f.3 and 4 Stack Opacity Limits – Batteries 13, 14, and 15

There were 34 deviations on Battery 13 for 99.23% compliance, 44 deviations on Battery 14 for 99.0% compliance, and 147 deviations on Battery 15 for 96.65% compliance of the 20% stack opacity limit. There were 6 deviations on Battery 13 for 99.8% compliance, 9 deviations on Battery 14 for 99.8% compliance, and 32 deviations on Battery 15 for 99.27% compliance of the 60% stack opacity limit. Details are listed in the attached Appendix.

Permit Requirement V.C.1.s – Enforcement Order 161 – Maintain and Operate COM

There were no deviations to the above referenced requirement.

Permit Requirement V.C.1.t and u –§63.72969a), (b), and (d) - Stack Opacity Limits – 13, 14, and 15

There were no deviations of the above limitations or requirements during the reporting period covered by this submittal.

Permit Requirement V.C.1.v –Emissions Limitations Table – Batteries 13, 14, and 15

There were no deviation of the limitations of SO₂, PM, PM-10, or PM2.5 for Batteries 13, 14, or 15 as listed in Table V.C.1.

Permit Requirement V.C.2 –Testing Requirements – Batteries 13, 14, and 15

There were no deviations of the testing requirements.

Permit Requirement V.C.3 –Monitoring Requirements – Batteries 13, 14, and 15

There were no deviations of the monitoring requirements.

Permit Requirement V.C.4 – Record Keeping Requirements Batteries 13, 14, and 15

Out-of-control periods per the above permit requirement and §63.7341 (c)(6) and (8)(iii) and/ or inoperable periods per §63.7341 (8)(ii) for stack COM's are detailed in Appendix 4.

There were no other record keeping deviations.

Permit Requirement V.C.5.a – Coke Plant Operations Data - Batteries 13, 14, and 15

The reports required by Paragraph V.A.5.a were submitted as required no later than twenty days after the end of each month. These are detailed in the attached Appendix.

Permit Requirement V.C.5.b- Enforcement Order 161

There were no deviations to the above requirement.

Permit Requirement V.C.5.c – Battery NESHAP – Batteries 13, 14, and 15

According to the semi-annual compliance certification and reporting requirements of 40 CFR §63.311(d) for the period covered by this report,

No coke oven gas was vented except through the bypass/ bleeder stack flare system of Batteries 13, 14, or 15.

There were no startup, shutdown, or malfunction events for Batteries 13, 14, or 15 that required the implementation of §63.310.

Work practices were not implemented under §63.306 at Batteries 13, 14, or 15.

Permit Requirement V.C.5.d – Venting of Coke Oven Gas

There were no instances of venting of coke oven gas during the report time period therefore, no reports were required.

Permit Requirement V.C.5.e – §63.310(d) Notification

There were no instances of startup, shutdown, or malfunction events for Batteries 13, 14, or 15 that required the implementation of §63.310 during the report time period therefore, no notifications were required.

Permit Requirement V.C.5.f – §63.310(e) Reports

There were no instances of startup, shutdown, or malfunction events for Batteries 13, 14, or 15 that required the implementation of §63.310 during the report time period therefore, no reports were required.

Permit Requirement V.C.5.g and h – Consent Order and Agreement Reports

There were no deviations.

Permit Requirement V.C.5.i – §63.7336(a) - MACT Stack Requirements

There were no deviations.

Permit Requirement V.C.5.j – §63.7336(b) – Periods of Startup, Shutdown, or Malfunction

There were no periods of start-up, shutdown, or malfunction that required the implementation of the Startup, Shutdown, or Malfunction Plan relating to the requirements of 40 CFR Part 63 Subpart CCCCC.

Permit Requirement V.C.5.k – §63.7340(a) – Initial Notifications

All required notifications required by §63.6(h)(4) and (5), §63.7(b) and (c), §63.8(e) and (f)(4) and §63.9(b) through (h) that apply were submitted by the specified dates.

Permit Requirement V.C.5.l – Test Notifications.

There were no deviations.

Permit Requirement V.C.5.m, n, and o – §63.7341(a, b and c)- Quarterly Stack Compliance Report

Quarterly compliance reports for Battery Stacks 13, 14, and 15 were submitted as required, according to the reporting requirements of 40 CFR §63.7341 and contained the information required. Reports for the period covered by this submittal are also included in this submittal.

Out-of-control periods per §63.7341 (c)(6) and (8)(iii) and/ or inoperable periods per §63.7341 (8)(ii) for stack COM's are detailed in the attached Appendix.

During the period stated above there were no start-ups, shutdowns, malfunctions or deviations relating to the emission limitation requirements of daily stack opacity.

Permit Requirement V.C.5.p – §63.7341(d)- Startup, Shutdown, or Malfunction Occurrences

During the period stated above there were no start-up, shutdown, malfunctions or deviations that required the implementation of the requirements in §63.10(d)(5)(ii).

Permit Requirement V.C.5.q – §63.7341(e) – Reporting of Deviations

All deviations have been submitted as required to the best of our ability.

Permit Requirement V.C.6 – Work Practices

There were no deviations from the work practice requirements required by Permit Paragraph V.C.6.

Section V.D - Batteries 13 -15 PEC

Permit Requirement V.D.1.a – §2105.21.e and IP 0052-I008 – PEC Outlet and Pushing Emissions

There were no documented deviations from the particulate mass emission rate from the pushing emission control system device. Testing was not conducted during the reporting period.

During the periods stated above there were 1 instances out 799 observations of non-compliance on 13 Battery (99.87% compliance), 10 instances out of 817 observations on 14 Battery (98.78% compliance) and 7 instances out of 816 on 15 Battery (99.14% compliance) with Condition VI.1.a.2 (fugitive pushing emissions or emissions from the pushing emission control system device outlet equal or exceeding an opacity of 20%). The details of these instances along with corrective actions taken are attached in the attached Appendix.

Permit Requirement V.D.1.b – §2105.21.e.6 – PM-10 SIP contingency

Implementation of the PM-10 SIP Contingency Plan was not required during the reporting period.

Permit Requirement V.D.1.c – §2105.03 and IP 0052-I008 – Pushing with the PEC

During the periods stated above there were 7 instances of non-compliance with the above condition (pushing emissions vented through the PEC system baghouse dust collector) that resulted in 656 ovens not being captured. There were 6 instances of reduced efficiency pushing operations at Battery No. 13, 14, and 15 PEC Baghouse that affected 609 ovens. These were detailed in monthly coking process reports submitted as required by Enforcement Order 202.E which are attached the attached Appendix.

There were 2 instances where the dp was outside of the normal operating range. There were no instances of failed recording of the dp values. These are detailed in the attached Appendix.

Permit Requirement V.D.1.d – §63.7290(a) – Mass Emission Rate from PEC - MACT

During the period stated above, there were no documented deviations with the requirements of §63.7290 on the pushing emissions control (PEC) devices servicing Batteries 13-15.

Permit Requirement V.D.1.e – §63.7290(b)(3) – Minimum Daily Fan Amps

There were no deviations from the minimum fan amp requirement for Batteries 13-15. There were no other deviations with the requirements of the minimum fan amperes as established during the initial performance test per the requirements of §63.7333(d) for this unit.

Permit Requirement V.D.1.f – §63.7333(a) – Maintaining Compliance with Mass Emission Rate and Testing

During the period stated above, there were no documented deviations with the requirements of §63.7333(a) on the pushing emissions control (PEC) devices servicing Batteries 13-15.

Permit Requirement V.D.1.g and h – §2105.03 and IP 0052-I008 – Emissions Limitations Table

During the period stated above, there were no documented deviations with above referenced requirements on the pushing emissions control (PEC) devices servicing Batteries 13-15.

Permit Requirement V.D.2 – Testing

There were no deviations to the testing requirements.

Permit Requirement V.D.3.a and b – IP0052-008 – Monitoring of differential pressure drop

There were no deviations to the above referenced monitoring requirements. Details are listed in the attached Appendix.

Permit Requirement V.D.3.c - §63.7291(a) – Pushing Observations

During the reporting period, there were no ineffective corrective actions pushing observations. A communication malfunction resulted in all pushing observations being missed on August 24. All of the ovens in service on Batteries 13 and 14 were observed every 90-days according to §63.7291(a)(1). On Battery 15 the A21, A22, A23, A24, A25, and B12 were out of service during all or a portion of the reporting period during which a 90-day observation was due. The following ovens were observed outside of the 90-day window but observed the first opportunity according to §63.7291(a)(1); A17 and A19 on 15 Battery. There were four training malfunctions that caused daylight pushes to be missed: A18 (two missed), A20, and A16 on 15 Battery. There were no other start-up, shutdown, malfunctions or deviations relating to the pushing work practice requirements of §63.7291(a).

Permit Requirement V.D.3.d - §63.7291(b) – Alternate to Work Practice

No alternate has been requested.

Permit Requirement V.D.3.e - §63.7300(c) – O&M Plan for PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.D.3.f, g, and h - §63.7330(a) and 63.7331(a) and (b) – Bag Leak Detection System for PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.D.3.i through k - §63.7331(c), (d) and (h)

There were no deviations to the above referenced requirements.

Permit Requirement V.D.3.l - §63.7331(g) – Volumetric Flow

The above requirement does not apply.

Permit Requirement V.D.3.m, n, and o - §63.330(d), 63.7332(a), and (b)

There were no deviations to the above referenced requirements.

Permit Requirement V.D.3.p - §63.333(d) – Minimum Fan Amps

There were four deviations to monitoring and recording the fan amps due to electrical malfunctions.

Permit Requirement V.D.3.q - §63.7334(a) – Pushing Observations

See above permit requirement.

Permit Requirement V.D.3.r - §63.7335(c) – Inspection of PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.D.4 – Record Keeping

There were no other deviations to the above referenced record keeping requirements.

Permit Requirement V.D.5.a – Coke Plant Operations Data

The reports required by Paragraph V.D.5.a were submitted as required no later than twenty days after the end of each month. The reports for the reporting period are attached in the attached Appendix.

Permit Requirement V.D.5.b, c, and d– IP0052-008 – Reporting of Instances of Non-compliance and Breakdown Reports

Instances of non-compliance per the above requirement are included in this submittal for the reporting period. There were no deviations regarding breakdown reporting.

Permit Requirement V.D.5.e through k – Reporting Requirements

There were no deviations with the above referenced reporting requirements.

Permit Requirement V.D.6 – Work Practice Standards

There were no deviations to the above referenced work practice standards.

Permit Section V.E – 19 and 20 Batteries

Permit Requirement V.E.1.a, b, c, d, and e – Battery Flare System – Batteries 19 and 20

There was deviation of the above requirements relating to the operation of the battery coke oven gas flare system on 19 or 20 Battery, during the period covered by this submittal. On October 31, the flare system for 19 and 20 Batteries was unavailable due to a malfunction.

Permit Requirement V.E.1.f – Big Plug Doors - Batteries 19 and 20

There were no deviations of the requirement to install and operated big plug doors with the following clarification of certification as submitted as part of the Title V Application Process.

The compliance certification contained in this submittal is based on the understanding that big plug doors, required by §2105.21.b.5, meet the specified dimensions contained in the regulation when initially installed except that portion of the plug located in the tunnel head above the design coal line. The plugs may experience inconsequential dimensional changes over time in the course of normal operations.

Permit Requirement V.E.1.g - §63.310(a)

There were no deviations to the above reference requirement.

Permit Requirement V.E.1.h – Flare or Combustion of High H₂S Coke Oven Gas– Batteries 19 and 20

There were no deviations of the above requirements relating to the operation of the battery coke oven gas flare system or combustion of coke oven gas during the period covered by this submittal on Battery 19. A plugged impulse line caused 20 Battery to flare on November 10.

Permit Requirement V.E.1.i – Flare Operation– Batteries 19 and 20

There were no documented deviations of the above requirement related to the operation of the battery coke oven gas flare system during the period covered by this submittal.

Permit Requirement V.E.1.j, and k –§63.304 and 63.306 Requirements – Batteries 19 and 20

There were no deviations of the above requirement (30-day rolling averages or implementation of Work Practices for doors, lids, charging, and offtakes) during the period covered by this submittal.

Permit Requirement V.E.1.l, m, n, o, p, q, r, s and t –§2105.21a, b, c, and d Requirements – Batteries 19 and 20

On Battery 19 there were the following deviations of the above requirements for percent leaking doors (zero deviations for 100% compliance), lids (one deviations for 99.49% compliance), or offtakes (three deviations for 98.48% compliance), 40 percent door leaking after 15 minutes (zero deviations for 100% compliance) or excess seconds of charging (zero deviations for 100% compliance). Details are listed in the attached Appendix.

On Battery 20 there were the following deviations of the above requirements for percent leaking doors (zero deviation for 100% compliance), lids (one deviation for 99.49% compliance), or offtakes (zero deviations for 100% compliance), 40 percent door leaking after 15 minutes (two deviation for 99.99% compliance) or excess seconds of charging (zero deviations for 100% compliance). Details are listed in the attached Appendix.

Permit Requirement V.E.1.u – §2105.21.e.5 Travel Requirements – Batteries 19 and 20

There were 13 deviations on Battery 19 for 98.45% compliance and 16 deviations on Battery 20 for 98.0% compliance of the opacity limitations for the transport of hot coke through the open atmosphere (travel) during the reporting period of this submittal. Details are listed in the attached Appendix.

Permit Requirement V.E.1.v – Enforcement Order 161 - Install and Operate a COM on Battery 20

There were no deviations to the above requirement.

Permit Requirement V.E.1.w and x – §2105.21.f.2 Stack Mass Emission Limit – Batteries 19 and 20

There were no documented deviations of the above requirement during the reporting period of this submittal.

Permit Requirement V.E.1.y – §2105.21.f.3 and 4 Stack Opacity Limits – Batteries 19 and 20

There were 36 deviations on Battery 19 for 99.18% compliance and 16 deviations on Battery 20 for 99.64% compliance of the 20% stack opacity limit. There were 6 deviations on Battery 19 for 99.86% compliance and 5 deviations on Battery 20 for 99.89% compliance of the 60% stack opacity limit. Details are listed in the attached Appendix.

Permit Requirement V.E.1.z and aa – §63.72969a), (b), and (d) - Stack Opacity Limits – Batteries 19 and 20

There were no deviations of the above limitations or requirements during the reporting period covered by this submittal. All notifications were submitted as required.

Permit Requirement V.E.1.bb and cc –Emissions Limitations Table – Batteries 19 and 20

There were no deviation of the limitations of SO₂, PM, PM-10, or PM2.5 for Batteries 19 or 20 as listed in Table V.E.1.

Permit Requirement V.E.2 –Testing Requirements – Batteries 19 and 20

There were no deviations of the testing requirements.

Permit Requirement V.E.3 –Monitoring Requirements – Batteries 19 and 20

There were no deviations of the testing requirements.

Permit Requirement V.E.4 – Record Keeping Requirements

Out-of-control periods per permit requirement V.4.c and §63.7341 (c)(6) and (8)(iii) and/ or inoperable periods per §63.7341 (8)(ii) for stack COM's are detailed in Appendix 4.

There were no other record keeping deviations.

Permit Requirement V.E.5.a and b – Coke Plant Operations Data and Stack COM Data

The reports required by Paragraph V.E.5.a and b were submitted as required no later than twenty days after the end of each month. Details are listed in the attached Appendix.

Permit Requirement V.E.5.c – Battery NESHAP – Batteries 19 and 20

According to the semi-annual compliance certification and reporting requirements of 40 CFR §63.311(d) for the period covered by this report,

No coke oven gas was vented except through the bypass/ bleeder stack flare system of Batteries 19 or 20.

There were no startup, shutdown, or malfunction events for Batteries 19 or 20 that required the implementation of §63.310.

Work practices were not implemented under §63.306 at Batteries 19 or 20.

Permit Requirement V.E.5.d – Venting of Coke Oven Gas

There were no instances of venting of coke oven gas during the report time period therefore, no reports were required.

Permit Requirement V.E.5.e – §63.310(d) Notification

There were no instances of startup, shutdown, or malfunction events for Batteries 19 or 20 that required the implementation of §63.310 during the report time period therefore, no notifications were required.

Permit Requirement V.E.5.f – §63.310(e) Reports

There were no instances of startup, shutdown, or malfunction events for Batteries 19 or 20 that required the implementation of §63.310 during the report time period therefore, no reports were required.

Permit Requirement V.E.5.g, h, and i – Consent Order Reports

All reports were submitted as required and are included in the attached Appendix.

Permit Requirement V.E.5.j– §63.7336(a) - MACT Stack Requirements

There were no instances where the emission limitations in Conditions V.A.1.t (daily average stack opacity) or V.A.1.u (initial compliance status notification) were not met.

Permit Requirement V.E.5.k – §63.7336(b) – Periods of Startup, Shutdown, or Malfunction

There were not periods of start-up, shutdown, or malfunction that required the implementation of the Startup, Shutdown, or Malfunction Plan relating to the requirements of 40 CFR Part 63 Subpart CCCCC.

Permit Requirement V.E.5.l and m– §63.7340(a) – Initial Notifications and test notifications

All required notifications required by §63.6(h)(4) and (5), §63.7(b) and (c), §63.8(e) and (f)(4) and §63.9(b) through (h) that apply were submitted by the specified dates.

Permit Requirement V.E.5.n and o – §63.7341(a) and (b) – Submittal of Quarterly Stack Compliance Reports

All reports were submitted as required.

Permit Requirement V.E.5.p – §63.7341(c)- Quarterly Stack Compliance Report

All reports were submitted as required.

Out-of-control periods per §63.7341 (c)(6) and (8)(iii) and/ or inoperable periods per §63.7341 (8)(ii) for stack COM's are detailed in Appendix 4.

During the period stated above there were no start-ups, shutdowns, malfunctions or deviations relating to the emission limitation requirements of daily stack opacity.

Permit Requirement V.E.5.q – §63.7341(d)- Startup, Shutdown, or Malfunction Occurrences

During the period stated above there were no start-up, shutdown, malfunctions or deviations that required the implementation of the requirements in §63.10(d)(5)(ii).

Permit Requirement V.E.5.r – §63.7341(e) – Reporting of Deviations

All deviations have been submitted as required to the best of our ability.

Permit Requirement V.E.6 – Work Practices

There were no deviations from the work practice requirements required by Permit Paragraph V.A.6.

Permit Section V.F -Batteries 19/20 PEC

Permit Requirement V.F.1.a – §2105.21.e and IP 0052- I005a – PEC Outlet and Pushing Emissions

There were no documented deviations from the particulate mass emission rate from the pushing emission control system device. Testing was not conducted during the reporting period.

During the periods stated above there were 22 instances out 838 observations of non-compliance on 19 Battery (97.4% compliance) and 20 instances out of 819 observations on 20 Battery (97.6% compliance) Condition VI.1.a.2 (fugitive pushing emissions or emissions from the pushing emission control system device outlet equal or exceeding an opacity of 20%). The details of these instances along with corrective actions taken are attached in the attached Appendix.

Permit Requirement V.F.1.b – §2105.21.e.6 – PM-10 SIP contingency

Implementation of the PM-10 SIP Contingency Plan was not required during the reporting period.

Permit Requirement V.F.1.c – §2105.03 and IP 0052- I005a – Pushing with the PEC

During the periods stated above there were 7 instances of non-compliance with the above condition (pushing emissions vented through the PEC system baghouse dust collector) that resulted in 77 ovens not being captured. There were 14 instances of reduced efficiency pushing operations at Battery No. 19 and 20 PEC Baghouse that affected 604 ovens. These were detailed in monthly coking process reports submitted as required by Enforcement Order 202.E which are attached in the attached Appendix.

There were 1716 instances where the dp was out of range and corrective action was implemented to return the dp to the normal operating range. These are detailed in the attached Appendix and were the results of a bag change and testing of the bags.

Permit Requirement V.F.1.d – §63.7290(a) – Mass Emission Rate from PEC - MACT

During the period stated above, there were no documented deviations with the requirements of §63.7290 on the pushing emissions control (PEC) devices servicing Batteries 19 and 20.

Permit Requirement V.F.1.e – §63.7290(b)(3) – Minimum Daily Fan Amps

There were three deviations for recording the fan amps on 19/20 PEC. There were no other deviations with the requirements of the minimum fan amperes as established during the initial performance test per the requirements of §63.7333(d) for these units. These are detailed in the attached Appendix.

Permit Requirement V.F.1.f – §63.7333(a) – Maintaining Compliance with Mass Emission Rate and Testing

During the period stated above, there were no documented deviations with the requirements of §63.7333(a) on the pushing emissions control (PEC) devices servicing Batteries 19 and 20.

Permit Requirement V.F.1.g, h, and i – §2105.03 and IP 0052-I005a – Emissions Limitations Table

During the period stated above, there were no documented deviations with above referenced requirements on the pushing emissions control (PEC) devices servicing Batteries 19 and 20.

Permit Requirement V.F.2 – Testing

There were no deviations to the testing requirements.

Permit Requirement V.F.3.a and b – IP0052- I005a – Monitoring of differential pressure drop

There were no deviations to the above referenced monitoring requirements.

Permit Requirement V.F.3.c - §63.7291(a) – Pushing Observations

During the reporting period, there were no ineffective corrective actions pushing observations. There was one late corrective action completions due to a communications malfunction on the B20/20.

There were no start-up, shutdown, malfunctions or deviations relating to the pushing work practice requirements of §63.7291(a).

Permit Requirement V.F.3.d - §63.7291(b) – Alternate to Work Practice

No alternate has been requested.

Permit Requirement V.F.3.e - §63.7300(c) – O&M Plan for PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.F.3.f, g, and h - §63.7330(a) and 63.7331(a) and (b) – Bag Leak Detection System for PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.F.3.i through k - §63.7331(c), (d) and (h)

There were no deviations to the above referenced requirements.

Permit Requirement V.F.3.l - §63.7331(g) – Volumetric Flow

The above requirement does not apply.

Permit Requirement V.F.3.m, n, and o - §63.330(d), 63.7332(a), and (b)

There were no other deviations to the above referenced requirements.

Permit Requirement V.F.3.p - §63.333(d) – Minimum Fan Amps

There were no other deviations to the above referenced requirements.

Permit Requirement V.F.3.q - §63.7334(a) – Pushing Observations

See above permit requirement.

Permit Requirement V.F.3.r - §63.7335(c) – Inspection of PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.F.4 – Record Keeping

There were no other deviations to the above referenced record keeping requirements.

Permit Requirement V.F.5.a, b, d, and e– IP0052-I005a – Reporting of Instances of Non-compliance and Breakdown Reports

Instances of non-compliance per the above requirement are included in this submittal for the reporting period. There were no deviations regarding breakdown reporting.

Permit Requirement V.F.5.c – Coke Plant Operations Data

The reports required by Paragraph V.F.5.a were submitted as required no later than twenty days after the end of each month. The reports for the reporting period are attached in the attached Appendix.

Permit Requirement V.F.5.e through k – Reporting Requirements

There were no deviations with the above referenced reporting requirements.

Permit Requirement V.F.6 – Work Practice Standards

There were no deviations to the above referenced work practice standards.

Permit Section V.G – B Battery

Permit Requirement V.G.1.a, b, c, d, e, and g – Battery Flare System –B Battery

There were two instances where the B Battery igniter flare was unavailable on September 10 and October 2. There was no environmental impact.

There were no other deviations of the above requirements relating to the operation of the battery coke oven gas flare system, during the period covered by this submittal.

Permit Requirement V.G.1.f - §63.310(a)

There were no deviations to the above reference requirement.

Permit Requirement V.G.1.h – Flare or Combustion of High H₂S Coke Oven Gas– B Battery

There were no deviations of the above requirements relating to the operation of the battery coke oven gas flare system.

Permit Requirement V.G.1.i, and j –§63.304 and 63.306 Requirements – B Battery

There were no deviations of the above requirement (30-day rolling averages or implementation of Work Practices for doors, lids, charging, and offtakes) during the period covered by this submittal.

Permit Requirement V.G.1.k, l, m, n, and o –§2105.21a, b, c, and d Requirements – B Battery

On B Battery there were the following deviations of the above requirements for percent leaking doors (zero deviations for 100% compliance), lids (zero deviations for 100% compliance), or offtakes (zero deviations for 100% compliance), 40 percent door leaking after 15 minutes (one deviation for 99.99% compliance) or excess seconds of charging (two deviations 99.98% compliance). Details are listed in the attached Appendix.

Permit Requirement V.G.1.p –§2105.21.e.5 Travel Requirements – B Battery

There were zero deviations on B Battery of the opacity limitations for the transport of hot coke through the open atmosphere (travel) for 100% compliance during the reporting period of this submittal.

Permit Requirement V.G.1.q –§2105.21.f.2 Stack Mass Emission Limit – B Battery

There were no documented deviations of the above requirement during the reporting period of this submittal.

Permit Requirement V.G.1.r – Enforcement Order 161 – Operation of COM

There were no deviations to the above referenced requirement.

Permit Requirement V.G.1.s –§2105.21.f.3 and 4 Stack Opacity Limits – B Battery

There were 43 deviations on B Battery for 99.02% compliance of the 20% stack opacity limit. There were 5 deviations on B Battery for 99.89% compliance of the 60% stack opacity limit. Details are listed in the attached Appendix.

Permit Requirement V.G.1.t and u –§63.72969a), (b), and (d) - Stack Opacity Limits – B Battery

There were no deviations of the above limitations or requirements during the reporting period covered by this submittal.

Permit Requirement V.G.1.v –Emissions Limitations Table – B Battery

There were no deviation of the limitations of SO₂, PM, PM-10, or PM2.5 for B Battery as listed in Table V.G.1.

Permit Requirement V.G.2 –Testing Requirements – B Battery

There were no deviations of the testing requirements.

Permit Requirement V.G.3 –Monitoring Requirements – B Battery

There were no deviations of the testing requirements.

Permit Requirement V.G.4 – Record Keeping Requirements

Out-of-control periods per permit requirement V.4.c and §63.7341 (c)(6) and (8)(iii) and/ or inoperable periods per §63.7341 (8)(ii) for stack COM's are detailed in Appendix 4.

There were no other record keeping deviations.

Permit Requirement V.G.5.a and b – Coke Plant Operations Data and Stack COM Data

The reports required by Paragraph V.G.5.a were submitted as required no later than twenty days after the end of each month. Details are included in the attached Appendix.

Permit Requirement V.G.5.c – Battery NESHAP – B Battery

According to the semi-annual compliance certification and reporting requirements of 40 CFR §63.311(d) for the period covered by this report,

No coke oven gas was vented except through the bypass/ bleeder stack flare system of B Battery.

There were no startup, shutdown, or malfunction events for B Battery that required the implementation of §63.310.

Work practices were not implemented under §63.306 at B Battery.

Permit Requirement V.G.5.d – Venting of Coke Oven Gas

There were no instances of venting of coke oven gas during the report time period therefore, no reports were required.

Permit Requirement V.G.5.e – §63.310(d) Notification

There were no instances of startup, shutdown, or malfunction events for B Battery that required the implementation of §63.310 during the report time period therefore, no notifications were required.

Permit Requirement V.G.5.f – §63.310(e) Reports

There were no instances of startup, shutdown, or malfunction events for B Battery that required the implementation of §63.310 during the report time period therefore, no reports were required.

Permit Requirement V.G.5.g, h, and i – Consent Order Reports

All reports were submitted as required and are included in the attached Appendix.

Permit Requirement V.G.5.h – §63.7336(a) - MACT Stack Requirements

There were no instances where the emission limitations in Conditions V.G.1.t (daily average stack opacity) or V.G.1.u (initial compliance status notification) were not met.

Permit Requirement V.G.5.i – §63.7336(b) – Periods of Startup, Shutdown, or Malfunction

There were not periods of start-up, shutdown, or malfunction that required the implementation of the Startup, Shutdown, or Malfunction Plan relating to the requirements of 40 CFR Part 63 Subpart CCCCC.

Permit Requirement V.G.5.j and k – §63.7340(a) – Initial Notifications

All required notifications required by §63.6(h)(4) and (5), §63.7(b) and (c), §63.8(e) and (f)(4) and §63.9(b) through (h) that apply were submitted by the specified dates. All notifications were made as required.

Permit Requirement V.G.5.l and m – §63.7341(a) and (b) – Submittal of Quarterly Stack Compliance Reports

Quarterly compliance reports were submitted as required and are contained in the attached Appendix.

Permit Requirement V.G.5.n – §63.7341(c)- Quarterly Stack Compliance Report

Quarterly compliance reports for B Battery are contained in the attached Appendix, per the requirements of 40 CFR §63.7341.

Out-of-control periods per §63.7341 (c)(6) and (8)(iii) and/ or inoperable periods per §63.7341 (8)(ii) for stack COM's are detailed in Appendix 4.

During the period stated above there were no start-up, shutdown, malfunctions or deviations relating to the emission limitation requirements of daily stack opacity.

Permit Requirement V.G.5.o – §63.7341(d)- Startup, Shutdown, or Malfunction Occurrences

During the period stated above there were no start-up, shutdown, malfunctions or deviations that required the implementation of the requirements in §63.10(d)(5)(ii).

Permit Requirement V.G.5.p – §63.7341(e) – Reporting of Deviations

All deviations have been submitted as required to the best of our ability.

Permit Requirement V.G.6 – Work Practices

There were no deviations from the work practice requirements required by Permit Paragraph V.A.6.

Batteries B PEC

Permit Requirement V.H.1.a – §2105.21.e – PEC Outlet and Pushing Emissions

There were no documented deviations from the particulate mass emission rate from the pushing emission control system device. Testing was conducted on September 18 -21, 2012.

During the report period there were 6 instances out 793 observations of non-compliance on B Battery (99.24% compliance) (fugitive pushing emissions or emissions from the pushing emission control system device outlet equal or exceeding an opacity of 20%). The details of this instance along with the corrective action taken are attached in the attached Appendix.

Permit Requirement V.H.1.b – §2105.03– Pushing with the PEC

During the periods stated above there were no instances of non-compliance with the above requirement. There were two instances of reduced efficiency of the baghouse shed which affected 105 ovens. These were reported as required and are detailed in the attached Appendix.

Permit Requirement V.H.1.c – §63.7290(a) – Mass Emission Rate from PEC - MACT

During the period stated above, there were no documented deviations with the requirements of §63.7290 on the pushing emissions control (PEC) devices servicing B Battery.

Permit Requirement V.H.1.d – §63.7290(b)(3) – Minimum Daily Fan Amps

There were no deviations with the requirements of the minimum fan amperes as established during the initial performance test per the requirements of §63.7333(d) for these units.

Permit Requirement V.H.1.e – §63.7333(a) – Maintaining Compliance with Mass Emission Rate and Testing

During the period stated above, there were no documented deviations with the requirements of §63.7333(a) on the pushing emissions control (PEC) devices servicing B Battery.

Permit Requirement V.H.1.f – §2105.03 and IP 0052-I006 – Emissions Limitations Table

During the period stated above, there were no documented deviations with above referenced requirements on the pushing emissions control (PEC) devices servicing B Battery.

Permit Requirement V.H.2 – Testing

There were no deviations to the testing requirements.

Permit Requirement V.H.3.a and b – IP0052-006 – Monitoring of differential pressure drop

There were no deviations to the above referenced monitoring requirements.

Permit Requirement V.H.3.c - §63.7291(a) – Pushing Observations

On November 6 and December 18, due to outages, four and three pushing observation, respectively could not be performed

There were no start-up, shutdown, malfunctions or deviations relating to the pushing work practice requirements of §63.7291(a).

Permit Requirement V.H.3.d - §63.7291(b) – Alternate to Work Practice

No alternate has been requested.

Permit Requirement V.H.3.e - §63.7300(c) – O&M Plan for PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.H.3.f, g, and h - §63.7330(a) and 63.7331(a) and (b) – Bag Leak Detection System for PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.H.3.i through k - §63.7331(c), (d) and (h)

There were no deviations to the above referenced requirements.

Permit Requirement V.H.3.l - §63.7331(g) – Volumetric Flow

The above requirement does not apply.

Permit Requirement V.H.3.m, n, and o - §63.330(d), 63.7332(a), and (b)

There were no deviations to the above referenced requirements.

Permit Requirement V.H.3.p - §63.333(d) – Minimum Fan Amps

There were no deviations to the above referenced requirements -- monitoring and recording of fan amps.

Permit Requirement V.H.3.q - §63.7334(a) – Pushing Observations

There were no other deviations to the above referenced requirements.

Permit Requirement V.H.3.r - §63.7335(c) – Inspection of PEC System

There were no deviations to the above referenced requirements.

Permit Requirement V.H.4 – Record Keeping

There were no deviations to the above referenced record keeping requirements.

Permit Requirement V.H.5.a, b, and d - Reporting of Instances of Non-compliance and Breakdown Reports

Instances of non-compliance per the above requirement are included in this submittal for the reporting period. There were no deviations regarding breakdown reporting.

Permit Requirement V.B.H.c – Coke Plant Operations Data

The reports required by Paragraph V.H.5.a were submitted as required no later than twenty days after the end of each month. The reports for the reporting period are attached in the attached Appendix.

Permit Requirement V.B.5.e through k – Reporting Requirements

There were no deviations with the above referenced reporting requirements.

Permit Requirement V.B.6 – Work Practice Standards

There were no deviations to the above referenced work practice standards.

Permit Section I – Quench Towers No. 1, 5, 7, and B

Permit Requirement V.I.1.a – §2105.21.g - Quench Water Quality

The certification contained in this report is based on the understanding that make-up water used for the quenching of coke will be “equivalent to, or better than, the water quality standards established for the Monongahela River by regulation promulgated by the DEP under the Pennsylvania Clean Streams Law, - except that water from the Monongahela River may be used for” such quenching make-up.

Permit Requirement V.I.1.b - §63.7295(a) – Water Quality

There were deviations of the quench water TDS restriction.

Permit Requirement V.I.1.c - §63.7326(d) – Compliance Status Notification

All initial compliance notifications were submitted previously according to the deadlines in §63.7326(d).

Permit Requirement V.I.2 – Testing Requirements

There were no deviations to the testing requirements. All required testing was performed in the required time frames.

Permit Requirement V.I.3 – Monitoring Requirements

There were no deviations to the monitoring requirements.

Permit Requirement V.I.4 – Record Keeping

There were no deviations to the record keeping requirements.

Permit Requirement V.I.5 – Reporting Requirements

During the period stated above there were no start-ups, shutdowns, or malfunctions relating to the quenching requirements of §63.7295.

Permit Requirement V.I.5 – Work Practice Requirements

There were no deviations to the work practice standards.

Permit Section J – Alternate Quench Towers No. 6 and 8

Note: The towers were removed from service on as part of the construction project authorized by IP0052 – I014.

Permit Requirement V.J.1.a – §2105.21.g - Quench Water Quality

The certification contained in this report is based on the understanding that make-up water used for the quenching of coke will be “equivalent to, or better than, the water quality standards established for the Monongahela River by regulation promulgated by the DEP under the Pennsylvania Clean Streams Law, - except that water from the Monongahela River may be used for” such quenching make-up.

Permit Requirement V.J.1.b - §63.7295(a) – Water Quality

There are no deviations to the above referenced requirement.

Permit Requirement V.J.1.c - §63.7326(d) – Compliance Status Notification

All initial compliance notifications were submitted previously according to the deadlines in §63.7326(d).

Permit Requirement V.J.2 – Testing Requirements

There were no deviations to the testing requirements. All required testing was performed in the required time frames.

Permit Requirement V.J.3 – Monitoring Requirements

There were no deviations to the monitoring requirements.

Permit Requirement V.J.4 – Record Keeping

There were no deviations to the record keeping requirements.

Permit Requirement V.J.5 – Reporting Requirements

During the period stated above there were no start-ups, shutdowns, or malfunctions relating to the quenching requirements of §63.7295.

Permit Requirement V.J.5 – Work Practice Requirements

There were no deviations to the work practice standards.

Permit Section K – Desulfurization Plant

Permit Requirement V.K.1.a – RACT Plan 234

There were no deviations of the above referenced requirement.

Permit Requirement V.K.1.b – General Opacity

There were no deviations of the above referenced requirement.

Permit Requirement V.K.1.c , d, e, f, and g – Enforcement Order 200

There were no deviations of the above listed requirements.

Permit Requirement V.K.1.h – Particulate Matter Emission Limits

There were no deviations of the particulate matter emission limitations.

Permit Requirement V.K.1.i – SO₂ Emission Limits

There were no deviations of the sulfur dioxide emission limitations.

Permit Requirement V.K.1.j - §2105.21.h – 40 gr/100 dscf H₂S Limit in COG

Upsets at the Desulfurization Plant caused downriver users to combust coke oven gas which contained sulfur compounds in excess of 40gr/100 dscf on December 28 due to a blockage at the Carbonate Plant and potentially exceed lb/hr SO₂ limits. No deviations of the SO₂ tons/year occurred. In addition, downriver users instantaneously combusted coke oven gas in 40gr/100 dscf on November 12, November 15, December 12, and December 31.

Permit Requirement V.K.2 – Testing Requirements

There were not deviations to the above referenced testing requirements.

Permit Requirement V.K.3 – Monitoring Requirements

There were not deviations to the above referenced monitoring requirements.

Permit Requirement V.K.4 – Record Keeping Requirements

There were not deviations to the above referenced record keeping requirements.

Permit Requirement V.K.5 – Reporting Requirements

There were not deviations to the above referenced reporting requirements. All events that caused the breakdown or unavailability of the equipment listed in Permit Requirement V.K.5.a were reported as required.

The reports required by Paragraph V.K.5.b were submitted as required no later than twenty days after the end of each month.

Permit Requirement V.K.6 – Work Practice standards

There are no listed requirements in the permit.

Permit Requirement V.K.7 – Additional Requirements

The engineering evaluation required the above permit requirement was completed and submitted as required.

Permit Section L – Keystone Cooling Tower

Permit Requirement V.L.1.a and b – §2105.21.h and 2103.12.a

There were no deviations of the above referenced permit requirements.

Permit Requirement V.L.1.c – §2105.21.h – Cooling Tower Water Quality

The certification contained in this report is based on the understanding that make-up water used for the quenching of coke will be “equivalent to, or better than, the water quality standards established for the Monongahela River by regulation promulgated by the DEP under the Pennsylvania Clean Streams Law, - except that water from the Monongahela River may be used for” such quenching make-up.

Permit Requirement V.L.2 – Testing Requirements

There are no requirements in this permit paragraph.

Permit Requirement V.L.3. – Monitoring Requirements

There are no requirements in this permit paragraph.

Permit Requirement V.L.4. – Record Keeping Requirements

There are no requirements in this permit paragraph.

Permit Requirement V.L.5. – Reporting Requirements

There are no requirements in this permit paragraph.

Permit Requirement V.L.6. – Work Practice Standards Requirements

There are no requirements in this permit paragraph.

Permit Requirement V.L.7. – Additional Requirements

There are no requirements in this permit paragraph.

Permit Section M – Coke By-Products Recovery Plant

Permit Requirement V.M.1.a and b – RACT Plan Requirement to Maintain and Operate Gas Blanketing System

There were no deviations to the above referenced requirement.

Permit Requirement V.L. 1.c – zz – 40 CFR Part 61 Subparts L and V

See below reporting requirements.

Permit Requirement V.L. 1.aaa – §61.342(a) – 40 CFR Part 61 Subpart FF

See below reporting requirements.

Permit Requirement V.L. 1.bbb – Storage Tanks

No deviations to report.

Permit Requirement V.L. 1.ccc and ddd– IP0052-I004a – Methanol Tanks

No deviations to report.

Permit Requirement V.L. 1.eee – Reactivation of Storage Tanks

No deviations to report.

Permit Requirement V.L. 1.fff – Emissions Limitations Table

No deviations to report.

Permit Requirement V.L. 2 – Testing Requirements

No deviations to report.

Permit Requirement V.L.3 – Monitoring Requirements

See below reporting requirements.

Permit Requirement V.L. 4 – Record Keeping Requirements

See below reporting requirements.

Permit Requirement V.L. 5.a – §61.138(e) – Initial Compliance Notification

All notifications were submitted as required.

Permit Requirement V.L. 5.b and c - §61.138(f) and 61.247(b) – Semiannual Report

Monthly monitoring of equipment in benzene service, as defined in 40 CFR, Part 61, Subparts L and V, has been conducted in accordance with Environmental Protection Agency (EPA) Reference Method 21, *Determination of Volatile Organic Compound Leaks*.

The results of these monitoring events, including the total components monitored and the number of leaks detected, can be found in Table 1. One leaking component in benzene service was deemed by U.S Steel, to require delay of repair. All other identified leaks were repaired within the mandated 5/15 day period.

During the July 2014 monitoring event, 143 valves and 9 exhausters were noted to be out of service. During the October 2014 monitoring event, 202 valves and 12 exhausters in benzene service were noted to be out of service. During the November 2014 monitoring event 2 valves and 2 pumps were found to be removed from their respective process lines, and have been permanently removed from the registry of equipment in benzene service.

Separate from the monitoring of components in benzene service, an audit of gas blanketing vessels was conducted on September 10-11 and 23, 2014. Five (5) leaks were identified during the monitoring event. Each leak was repaired within the mandated 5/15 day period.

Permit Requirement V.L. 5.d – Alternate Standard

No alternate standard has been requested.

Permit Requirement V.L. 5.e - §61.357(a)(1), (a)(2), (a)(3), and (c) – Total Annual Benzene Reporting

The Total Annual Benzene Report was completed and submitted as required.

Permit Requirement V.L. 5.f and g– IP0052-I004a - Methanol Tanks

During the periods stated above there were no documented periods of non-compliance with Conditions V.A.1.a or b (emissions from the storage tanks and operation of the gas blanketing system).

During the periods stated above methanol was stored in Tanks V-400 and V-410 and Tank V-430 contains MEA. The net throughput of the methanol wash system for the reporting period was 43,089 gallons; net throughput of the MEA tank was zero.

Permit Requirement V.L.6 – Work Practices

No deviations to report.

Permit Requirement V.N.5 – No. 1 and No. 2 Continuous Barge Unloaders

This fulfills the requirements for semi-annual reporting of No. 1 and No. 2 Continuous Barge Unloaders per Permit Requirement V.N.5.

There were no deviations to report.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.O.5 – Pedestal Crane Unloader

This fulfills the requirements for semi-annual reporting of the Pedestal Crane Unloader per Permit Requirement V.O.5.

There were no deviations to report.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.P.5 – Wharf Crane Unloader

This fulfills the requirements for semi-annual reporting of the Wharf Crane Unloader per Permit Requirement V.P.5.

There were no deviations to report.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.Q.5 – Coal Transfer

This fulfills the requirements for semi-annual reporting of Coal Transfer per Permit Requirement V.Q.5.

There were no deviations to report.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.R.5 – No. 1 Primary and Secondary Pulverizers and No. 2 Primary and Secondary Pulverizers

This fulfills the requirements for semi-annual reporting of the No. 1 Primary and Secondary Pulverizers and No. 2 Primary and Secondary Pulverizers per Permit Requirement V.R.5.

The compliance certification contained in this application is based on the understanding that 82104.02.e "...enclose all coal feed chutes...", requires the enclosure of all feed chutes to the pulverizers per Paragraph 14, page 7 of the GASP Agreement, "...enclose all feed chutes to the pulverizers..."

There were no deviations to report.

The type of dust suppressant used at all pulverizers is #2 Diesel fuel.

The total amount of dust suppressant applied to the coal at all of the pulverizers was monitored and recorded. See the attached Appendix.

Permit Requirement V.S.5 – Surge Bins and Bunkers

This fulfills the requirements for semi-annual reporting of the Surge Bins and Bunkers per Permit Requirement V.S.5.

There were no deviations to report.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.T.5 – Coke Transfer

This fulfills the requirements for semi-annual reporting of Coke Transfer per Permit Requirement V.T.5.

There were no deviations to report.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.U.5 – No. 1 and No. 2 Coke Screening Stations

This fulfills the requirements for semi-annual reporting of the No. 1 and No. 2 Coke Screening Stations per Permit Requirement V.U.5.

There were no deviations to report.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.V.5 – Coke Screening Station No. 3

This fulfills the requirements for semi-annual reporting of Coke Screening Station #3 per Permit Requirement V.V.5.

There are no deviations to report.

The No 3 Screening was not in operation during the report period. It has been replaced by the No 4 Screening Station.

Permit Requirement V.W.5 – Boom Conveyor

This fulfills the requirements for semi-annual reporting of the Boom Conveyor (coal pile destocking) per Permit Requirement V.W.5.

There were no deviations to report.

The monthly tons of coal transferred by the boom conveyor operations was monitored and recorded. See Appendix 12.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.X.5 – Coal and Coke Recycle Screening

This fulfills the requirements for semi-annual reporting of Coal and Coke Recycle Screening per Permit Requirement V.X.5.

There were no deviations to report.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.Y.5 – Peter's Creek Coke Screening Station

This fulfills the requirements for semi-annual reporting of the Peter's Creek Coke Screening Station per Permit Requirement V.Y.5.

There were no deviations to report.

See the attached Appendix for the annual visible emission observation performed and recorded during the reporting period.

Permit Requirement V.Z.5 – Light Oil Barge Loading

This fulfills the requirements for semi-annual reporting of Light Oil Barge Loading per Permit Requirement V.Z.5.

The updated documentation file for each marine tank vessel leak test was recorded. See the attached Appendix.

A malfunction of the light oil barge vapor recovery system resulted in a release on August 6. There are no other deviations to report.

All notifications have been made as required.

Permit Requirement V.AA.5 – Boiler No. 1

This fulfills the requirements for semi-annual reporting of Boiler No. 1 per Permit Requirement V.AA.5.

Upsets at the Desulfurization Plant caused downriver users to combust coke oven gas which contained sulfur compounds in excess of 40gr/100 dscf on December 28 and potentially exceed lb/hr SO₂ limits. No deviations of the SO₂ tons/year occurred. In addition, downriver users instantaneously combusted coke oven gas in 40gr/100 dscf on November 12, November 15, December 12, and December 31.

There are no other deviations to report.

The monthly usage of coke oven gas and natural gas was monitored and recorded. See the attached Appendix.

The monthly average H₂S content of the coke oven gas was monitored and recorded. See the attached Appendix.

Permit Requirement V.BB.5 – Boiler No. 2

This fulfills the requirements for semi-annual reporting of Boiler No. 2 per Permit Requirement V.BB.5.

Upsets at the Desulfurization Plant caused downriver users to combust coke oven gas which contained sulfur compounds in excess of 40gr/100 dscf on December 28 and potentially exceed lb/hr SO₂ limits. No deviations of the SO₂ tons/year occurred. In addition, downriver users instantaneously combusted coke oven gas in 40gr/100 dscf on November 12, November 15, December 12, and December 31.

There are no other deviations to report.

The monthly usage of coke oven gas and natural gas was monitored and recorded. See the attached Appendix.

The monthly average H₂S content of the coke oven gas was monitored and recorded. See the attached Appendix.

Permit Requirement V.CC.5 – Boilers R1 and R2

This fulfills the requirements for semi-annual reporting of Boilers R1 and R2 per Permit Requirement V.CC.5.

No deviations of the SO₂ lb/ hr or tons/year occurred at Boilers R1 or R2.

There are no other deviations to report.

The monthly usage of coke oven gas and natural gas was monitored and recorded. See the attached Appendix.

The monthly average H₂S content of the coke oven gas was monitored and recorded. See the attached Appendix.

Permit Requirement V.DD.5 – Boilers T1 and T2

This fulfills the requirements for semi-annual reporting of Boilers T1 and T2 per Permit Requirement V.DD.5.

Upsets at the Desulfurization Plant caused downriver users to combust coke oven gas which contained sulfur compounds in excess of 40gr/100 dscf on December 28 and potentially exceed lb/hr SO₂ limits. No deviations of the SO₂ tons/year occurred. In addition, downriver users instantaneously combusted coke oven gas in 40gr/100 dscf on November 12, November 15, December 12, and December 31.

There are no other deviations to report.

The monthly usage of coke oven gas and natural gas was monitored and recorded. See the attached Appendix.

The monthly average H₂S content of the coke oven gas was monitored and recorded. See the attached Appendix.

Permit Requirement V.EE.5 – Ammonia Flare

This fulfills the requirements for semi-annual reporting of the ammonia flare per Permit Requirement V.EE.5.

The monthly fuel usage and monthly hours of operation was monitored and recorded. See the attached Appendix.

There are no deviations to report.

Permit Requirement V.FF – Abrasive Blasting

No deviations to report.

Permit Requirement V.GG – Cold Cleaning Machines

No deviations to report.

Section VI – Alternative Operating Scenarios

There are no alternative operating scenarios.

Fourth Quarter 2014

Stacks	October	November	December	Total	Total
1	0	2	1	3	\$1,500
2	2	2	3	7	\$3,500
3	0	3	2	5	\$2,500
13	0		0	0	\$0
14	4	2	2	8	\$4,000
15	0		6	6	\$3,000
19	8	3	3	14	\$7,000
20	8	1	8	17	\$8,500
B	3	1	0	4	\$2,000
Subtotal	25	14	25	64	\$32,000
C*	0		0	0	

Stacks	October	November	December	Total	Total Minus 33	Total minus 33 Penalty Amount
1	7	7	5	19		
2	19	45	23	87	54	\$27,000
3	17	30	11	58	25	\$12,500
13	5	8	2	15		
14	9	4	7	20		
15	42	11	18	71	38	\$19,000
19	6		5	11		
20	1		1	2		
B	7	7	5	19		
Subtotal	113	112	77	302	117	\$58,500
C*	0			0		
Total	113	112	77	302		

Soaking	
Stacks	running Total
Pushing	\$58,500
Soaking	\$32,000
Total	\$90,500

* C Battery is not contained in the CO&A therefore is not included in the total

TOPSIDE OBS
BREAKDOWNS
FROM: 7/1/2014
TO: 12/31/2014

REGULATION: All

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|         |        | AVERAGE | AVERAGE | AVERAGE | AVERAGE | SIP     | SIP     | AVERAGE | AVERAGE | SIP     | SIP     | AVERAGE | AVERAGE | NESHAP  | AVERAGE  | NESHAP  | NESHAP   |
|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|----------|
|         |        | AVERAGE | % CAPS  | % PIPE  | % OFFT  | AVERAGE | OFFTAKE | SIP     | OFFTAKE | AVERAGE | SIP     | AVERAGE | % LIDS  | AVERAGE | LEAK-AVG | OFFTAKE | LEAK-AVG |
|         |        | AVERAGE | LEAKING | LEAKING | LEAKING | AVERAGE | LIMIT   | OFFTAKE | LIMIT   | LEAKING | PERFORM | LEAKING | LEAKING | PERFORM | LEAK-AVG | PERFORM | PERFORM  |
| BATTERY | OBSERV | LEAKING |         |         |         |         |         |         |         |         |         |         |         |         |          |         |          |
| 01      | 190    | 1.04    | 0.77%   | 0.02%   | 0.88%   | 0.00    | 5.00%   | 100.00% | 5.00%   | 0.00    | 100.00% | 0.00%   | 0.00%   | 100.00% | 0.00%    | 2.50%   | 100.00%  |
| 02      | 195    | 0.67    | 0.50%   | 0.01%   | 0.57%   | 0.01    | 5.00%   | 100.00% | 5.00%   | 0.01    | 100.00% | 0.00%   | 0.00%   | 100.00% | 0.00%    | 2.50%   | 100.00%  |
| 03      | 193    | 1.02    | 0.57%   | 0.02%   | 0.88%   | 0.00    | 5.00%   | 100.00% | 5.00%   | 0.00    | 100.00% | 0.00%   | 0.00%   | 100.00% | 0.00%    | 2.50%   | 100.00%  |
| 13      | 197    | 0.61    | 0.44%   | 0.01%   | 0.52%   | 0.02    | 4.00%   | 100.00% | 4.00%   | 0.02    | 99.48%  | 0.01%   | 0.01%   | 100.00% | 0.00%    | 2.50%   | 100.00%  |
| 14      | 196    | 0.90    | 0.65%   | 0.03%   | 0.77%   | 0.03    | 4.00%   | 100.00% | 4.00%   | 0.03    | 99.43%  | 0.01%   | 0.01%   | 100.00% | 0.01%    | 2.50%   | 100.00%  |
| 15      | 195    | 0.54    | 0.40%   | 0.02%   | 0.52%   | 0.00    | 4.00%   | 100.00% | 4.00%   | 0.00    | 100.00% | 0.00%   | 0.00%   | 100.00% | 0.00%    | 2.50%   | 100.00%  |
| 19      | 197    | 2.09    | 1.38%   | 0.03%   | 1.24%   | 0.09    | 5.00%   | 99.46%  | 5.00%   | 0.09    | 99.48%  | 0.03%   | 0.03%   | 100.00% | 0.00%    | 2.50%   | 100.00%  |
| 20      | 197    | 1.62    | 0.96%   | 0.01%   | 0.96%   | 0.11    | 4.00%   | 100.00% | 4.00%   | 0.11    | 99.49%  | 0.03%   | 0.03%   | 100.00% | 0.02%    | 2.50%   | 100.00%  |
| B       | 194    | 0.26    | 0.19%   | 0.00%   | 0.18%   | 0.01    | 4.00%   | 100.00% | 4.00%   | 0.01    | 100.00% | 0.00%   | 0.00%   | 100.00% | 0.00%    | 2.50%   | 100.00%  |
| C       | 191    | 0.05    | 0.05%   | 0.00%   | 0.06%   | 0.06    | 3.00%   | 100.00% | 3.00%   | 0.06    | 99.95%  | 0.02%   | 0.02%   | 100.00% | 0.02%    | 1.50%   | 100.00%  |
|         |        |         |         |         |         |         |         |         |         |         |         |         |         |         |          |         |          |
| 1945    |        | 0.88    | 0.53%   | 0.01%   | 0.66%   | 0.03%   | 99.85%  |         |         |         | 99.59%  | 0.01%   | 0.01%   | 100.00% | 0.01%    |         | 100.00%  |



REASON: All

REGULATION: All

AGENCY: All

| BATTERY   | TOTAL # | TOTAL | AVERAGE |       | PUSH SIZE |           | AVERAGE |        | COKE SIZE |       | AVERAGE |         | SIP     |             | SIF DOOR  |              | NESHAP     |            | AVERAGE % |             | NESHAP DOOR |       |
|-----------|---------|-------|---------|-------|-----------|-----------|---------|--------|-----------|-------|---------|---------|---------|-------------|-----------|--------------|------------|------------|-----------|-------------|-------------|-------|
|           |         |       | # DOORS | LEAKS | SIP %     | DOOR ONLY | LEAKS   | % PUSH | DOOR ONLY | LEAKS | % CORE  | % OTHER | DOOR    | PERFORMANCE | AVG DAILY | % DOOR LEAKS | DOOR LEAKS | 30 DAY AVG | DOOR      | PERFORMANCE | LIMIT       |       |
|           |         |       |         |       |           |           |         |        |           |       |         |         |         |             |           |              |            |            |           |             |             | LEAKS |
| 01        | 194     | 206   | 1.66    | 0.25% |           | 18        | 0.14%   |        | 145       | 1.17% | 0.14%   |         | 100.00% | 5.00%       | 5.00%     | 0.84%        |            | 100.00%    | 0.82%     | 100.00%     | 3.3%        |       |
| 02        | 198     | 141   | 0.72    | 0.08% |           | 23        | 0.18%   |        | 88        | 0.79% | 0.02%   |         | 100.00% | 5.00%       | 5.00%     | 0.59%        |            | 100.00%    | 0.58%     | 100.00%     | 3.3%        |       |
| 03        | 198     | 255   | 1.29    | 0.30% |           | 38        | 0.30%   |        | 153       | 1.54% | 0.05%   |         | 100.00% | 5.00%       | 5.00%     | 1.05%        |            | 100.00%    | 0.99%     | 100.00%     | 3.3%        |       |
| 13        | 196     | 103   | 0.53    | 0.03% |           | 17        | 0.14%   |        | 68        | 0.57% | 0.00%   |         | 100.00% | 5.00%       | 5.00%     | 0.43%        |            | 100.00%    | 0.41%     | 100.00%     | 3.3%        |       |
| 14        | 192     | 105   | 0.55    | 0.04% |           | 21        | 0.18%   |        | 70        | 0.60% | 0.02%   |         | 100.00% | 5.00%       | 5.00%     | 0.45%        |            | 100.00%    | 0.40%     | 100.00%     | 3.3%        |       |
| 15        | 194     | 94    | 0.48    | 0.05% |           | 12        | 0.10%   |        | 69        | 0.58% | 0.00%   |         | 100.00% | 5.00%       | 5.00%     | 0.45%        |            | 100.00%    | 0.38%     | 100.00%     | 3.3%        |       |
| 18        | 195     | 116   | 0.59    | 0.06% |           | 67        | 0.39%   |        | 35        | 0.21% | 0.02%   |         | 100.00% | 5.00%       | 5.00%     | 0.34%        |            | 100.00%    | 0.33%     | 100.00%     | 3.3%        |       |
| 20        | 198     | 109   | 0.55    | 0.03% |           | 53        | 0.34%   |        | 36        | 0.21% | 0.00%   |         | 100.00% | 5.00%       | 5.00%     | 0.32%        |            | 100.00%    | 0.28%     | 100.00%     | 3.3%        |       |
| B         | 195     | 766   | 3.93    | 0.68% |           | 45        | 0.31%   |        | 688       | 4.70% | 0.07%   |         | 100.00% | 5.00%       | 5.00%     | 0.52%        |            | 100.00%    | 0.50%     | 100.00%     | 4%          |       |
| C         | 191     | 84    | 0.44    | 0.16% |           | 25        | 0.16%   |        | 58        | 0.38% | 0.00%   |         | 98.43%  | 3.00%       | 3.00%     | 0.26%        |            | 100.00%    | 0.38%     | 100.00%     | 2%          |       |
| TOTAL AVG | 1949    | 1979  | 1.01    | 0.11% |           | 325       | 0.23%   |        | 1462      | 1.07% | 0.03%   |         | 99.84%  |             |           | 0.52%        |            |            | 0.50%     | 100.00%     |             |       |



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| REASON: All     |        |          |          |         |           |          |          |          |             |           |         |           |           |           |
|-----------------|--------|----------|----------|---------|-----------|----------|----------|----------|-------------|-----------|---------|-----------|-----------|-----------|
| REGULATION: All |        |          |          |         |           |          |          |          |             |           |         |           |           |           |
| AGENCY: All     |        |          |          |         |           |          |          |          |             |           |         |           |           |           |
| BATTERY         | NUMBER | OBSERV   | LOW OPAC | MINUTES | HOURS OUT | LOW OPAC | HOURS IN | LOW OPAC | PERFORMANCE | HIGH OPAC | MINUTES | HIGH OPAC | HOURS OUT | HIGH OPAC |
|                 |        |          |          |         |           |          |          |          |             |           |         |           |           |           |
| 01              | 4,309  | 621.17   | 53       | 4,336   | 4,223     | 98.79%   | 0.50     | 3        | 4,386       | 98.83%    | 184     | 0         | 0.07      | 100.00%   |
| 02              | 4,352  | 1,597.50 | 169      | 4,223   | 4,236     | 98.15%   | 23.33    | 37       | 4,356       | 99.16%    | 184     | 0         | 1.11      | 100.00%   |
| 03              | 4,393  | 1,860.00 | 137      | 4,236   | 4,357     | 98.43%   | 19.67    | 33       | 4,380       | 98.25%    | 184     | 0         | 1.24      | 100.00%   |
| 13              | 4,391  | 494.57   | 34       | 4,357   | 4,244     | 99.23%   | 9.00     | 6        | 4,385       | 99.86%    | 184     | 0         | 1.32      | 100.00%   |
| 14              | 4,393  | 428.17   | 44       | 4,349   | 4,377     | 99.09%   | 24.33    | 9        | 4,384       | 98.80%    | 184     | 0         | 1.08      | 100.00%   |
| 15              | 4,391  | 1,429.83 | 147      | 4,244   | 4,350     | 98.65%   | 35.67    | 32       | 4,359       | 98.27%    | 184     | 0         | 1.23      | 100.00%   |
| 19              | 4,395  | 375.00   | 36       | 4,359   | 4,377     | 99.18%   | 6.83     | 5        | 4,389       | 99.86%    | 184     | 0         | 1.78      | 100.00%   |
| 20              | 4,393  | 202.17   | 15       | 4,377   | 4,350     | 99.64%   | 7.50     | 5        | 4,388       | 98.89%    | 184     | 0         | 1.31      | 100.00%   |
| B               | 4,393  | 786.50   | 43       | 4,350   | 4,377     | 99.02%   | 7.17     | 5        | 4,388       | 98.89%    | 184     | 0         | 1.77      | 100.00%   |
| C               | 4,378  | 15.83    | 1        | 4,377   | 4,378     | 99.98%   | 0.00     | 0        | 4,378       | 100.00%   | 184     | 0         | 1.65      | 100.00%   |
| Total           | 43,908 | 7,520.83 | 700      | 43,208  |           |          | 134.00   | 136      | 43,772      |           |         |           |           |           |
| Average         |        |          |          |         |           | 98.41%   |          |          |             | 98.69%    |         |           | 1.33      |           |



|                                           |  |  |  |  |  |  |  |  |  |                                                                                  |                      |                   |                   |                     |                          |                       |                          |  |  |             |  |  |  |  |  |  |  |  |  |
|-------------------------------------------|--|--|--|--|--|--|--|--|--|----------------------------------------------------------------------------------|----------------------|-------------------|-------------------|---------------------|--------------------------|-----------------------|--------------------------|--|--|-------------|--|--|--|--|--|--|--|--|--|
| US Steel<br>Clairton Work<br>Ver0.6.4.7.4 |  |  |  |  |  |  |  |  |  | PUSHING & TRAVEL SUMMARY<br>BREAKDOWNS INCLUDED<br>FROM: 7/1/2014 TO: 12/31/2014 |                      |                   |                   |                     |                          |                       |                          |  |  |             |  |  |  |  |  |  |  |  |  |
| REASON: All                               |  |  |  |  |  |  |  |  |  | REGULATION: All                                                                  |                      |                   |                   |                     |                          |                       |                          |  |  | AGENCY: All |  |  |  |  |  |  |  |  |  |
| BATTERY                                   |  |  |  |  |  |  |  |  |  | TOTAL NO.<br>OBSERV.                                                             | PREPUSH<br>MAX OPAC. | PUSH<br>MAX OPAC. | TRAV<br>MAX OPAC. | PUSH<br>PERFORMANCE | NUM PUSH OUT<br>OF COMP. | TRAVEL<br>PERFORMANCE | NUM TRAV OUT<br>OF COMP. |  |  |             |  |  |  |  |  |  |  |  |  |
| 01                                        |  |  |  |  |  |  |  |  |  | 1495                                                                             | 0%                   | 45%               | 35%               | 99.46%              | 08                       | 99.60%                | 06                       |  |  |             |  |  |  |  |  |  |  |  |  |
| 02                                        |  |  |  |  |  |  |  |  |  | 1581                                                                             | 0%                   | 60%               | 30%               | 99.43%              | 09                       | 99.55%                | 07                       |  |  |             |  |  |  |  |  |  |  |  |  |
| 03                                        |  |  |  |  |  |  |  |  |  | 1506                                                                             | 0%                   | 70%               | 100%              | 99.60%              | 06                       | 99.54%                | 07                       |  |  |             |  |  |  |  |  |  |  |  |  |
| 09                                        |  |  |  |  |  |  |  |  |  | 4                                                                                | 0%                   | 15%               | 10%               | 100.00%             | 00                       | 100.00%               | 00                       |  |  |             |  |  |  |  |  |  |  |  |  |
| 13                                        |  |  |  |  |  |  |  |  |  | 799                                                                              | 0%                   | 25%               | 10%               | 99.87%              | 01                       | 100.00%               | 00                       |  |  |             |  |  |  |  |  |  |  |  |  |
| 14                                        |  |  |  |  |  |  |  |  |  | 817                                                                              | 0%                   | 100%              | 100%              | 98.78%              | 10                       | 98.53%                | 12                       |  |  |             |  |  |  |  |  |  |  |  |  |
| 15                                        |  |  |  |  |  |  |  |  |  | 816                                                                              | 0%                   | 100%              | 50%               | 99.14%              | 07                       | 98.77%                | 10                       |  |  |             |  |  |  |  |  |  |  |  |  |
| 19                                        |  |  |  |  |  |  |  |  |  | 838                                                                              | 0%                   | 95%               | 70%               | 97.49%              | 21 22                    | 98.45%                | 13                       |  |  |             |  |  |  |  |  |  |  |  |  |
| 20                                        |  |  |  |  |  |  |  |  |  | 819                                                                              | 0%                   | 100%              | 70%               | 97.44%              | 21 20                    | 98.47%                | 15 16                    |  |  |             |  |  |  |  |  |  |  |  |  |
| B                                         |  |  |  |  |  |  |  |  |  | 793                                                                              | 0%                   | 75%               | 0%                | 99.24%              | 06                       | 100.00%               | 00                       |  |  |             |  |  |  |  |  |  |  |  |  |
| C                                         |  |  |  |  |  |  |  |  |  | 756                                                                              | 0%                   | 15%               | 10%               | 100.00%             | 00                       | 100.00%               | 00                       |  |  |             |  |  |  |  |  |  |  |  |  |
| TOT/MAX                                   |  |  |  |  |  |  |  |  |  | 10224                                                                            | 0%                   | 100%              | 100%              | 99.13%              | 89                       | 99.33%                | 70                       |  |  |             |  |  |  |  |  |  |  |  |  |
| AVERAGE                                   |  |  |  |  |  |  |  |  |  |                                                                                  |                      |                   |                   |                     |                          |                       |                          |  |  |             |  |  |  |  |  |  |  |  |  |

Database errors



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